

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

#### **LISTING OF CLAIMS:**

Claim 1 (currently amended):

A frequency translator comprising:

a circuit board;

a phase-locked loop circuit comprising a phase detector, a divider, and a voltage controlled oscillator;

a resonator comprising a surface-acoustic wave device adapted to be mounted and secured to the circuit board;

~~a compliant material positioned between the resonator and the circuit board;~~

an impedance network operably coupled to the resonator, the network comprising ~~at least one~~ a plurality of passive devices with and an electrically conductive lead ~~attached to~~ associated with each of the passive devices;

a package containing said circuit board and said phase-locked loop circuit; and,

said one or more of said conductive leads being severed severable to define one or more severed conductive leads whereby the impedance of the impedance network is increased by the inductance of the one or more passive devices associated with the one or more severed conductive leads respectively.

Claim 2 (cancelled):

The frequency translator of Claim 1, said compliant material comprising silicone.

Claim 3 (cancelled):

The frequency translator of Claim 1, said compliant material comprising a metal or metal alloy filling.

Claim 4 (cancelled):

The frequency translator of Claim 1, said compliant material comprising a silver-filled silicone.

Claim 5 (cancelled):

The frequency translator of Claim 1, said compliant material having a Young's Modulus of less than 1 GPa.

Claim 6 (cancelled):

The frequency translator of Claim 1, said compliant material having a Young's Modulus of less than .5 GPa.

Claim 7 (original):

The frequency translator of Claim 1, said package containing a nonvolatile memory.

Claim 8 (original):

The frequency translator of Claim 7, said nonvolatile memory containing control data to configure a prescaler within the phase-locked loop.

Claim 9 (original):

The frequency translator of Claim 1 wherein said conductive lead is a portion of printed wiring on the circuit board.

Claim 10 (original):

The frequency translator of Claim 1 wherein said impedance network is fabricated from a portion of printed wiring on the circuit board.

Claim 11 (currently amended):

The frequency translator of Claim 1, wherein each of said passive devices ~~comprising~~ comprises at least one inductive segment of printed wiring.

Claim 12 (original):

The frequency translator of Claim 1, said impedance network comprising at least two passive devices.

Claim 13 (original):

The frequency translator of Claim 1, said impedance network comprising five passive devices.

Claim 14 (currently amended):

The frequency translator of Claim 1, said impedance network comprising at least two passive devices serially connected together, each of the passive devices defining terminal ends and the conductive lead associated therewith extending between and connected to the terminal ends.

Claim 15 (currently amended):

The frequency translator of Claim 1 wherein each of said ~~at least one~~ passive devices is a curvilinear portion of printed wiring on the circuit board terminating into opposed ends, the conductive lead associated therewith extending between and connected to the opposed ends thereof.

Claim 16 (currently amended):

The frequency translator of Claim 1 wherein each of said ~~at least one~~ passive devices is an inductor.

Claim 17 (currently amended):

The frequency translator of Claim 1 wherein each of said ~~at least one~~ passive devices is a capacitor.

Claim 18 (currently amended):

The frequency translator of Claim 1 wherein each of said ~~at least one~~ passive devices is a resistor.

Claim 19 (currently amended):

The frequency translator of Claim 1 wherein said package ~~having~~ defines a through-hole ~~about~~ positioned above said electrically conductive lead for focusing a laser beam into the through-hole and onto the conductive lead for severing the same.

Claim 20 (original):

The frequency translator of Claim 1 wherein said phase-locked loop circuit generates about a 622.08 MHZ output in response to about a 155.52 MHZ input.

Claim 21 (currently amended):

A frequency translator comprising:

a circuit board composed of a first material having frequency translator circuitry mounted ~~to the circuit board~~ thereto and comprising a phase-locked loop having a resonator ~~comprising a surface acoustic wave device; and~~

a compliant material positioned between the circuit board and the resonator~~[[;]]~~ and having a Young's Modulus which is lower than the Young's Modulus of the first material of said circuit board.

~~at least one passive device coupled to the resonator; and,~~  
~~an electrically conductive lead shorting circuiting at least a portion of said passive device.~~

Claim 22 (currently amended):

The frequency translator of Claim 21, said ~~compliant~~ compliant material comprising silicone.

Claim 23 (original):

The frequency translator of Claim 21, said compliant material comprising a metal or metal alloy filling.

Claim 24 (original):

The frequency translator of Claim 21, said compliant material comprising a silver-filled silicone.

Claim 25 (original):

The frequency translator of Claim 21, said compliant material having a Young's Modulus of less than 1 GPa.

Claim 26 (currently amended):

The frequency translator of Claim 21, said ~~compliant~~ compliant material having a Young's Modulus of less than .5 GPa.

Claim 27 (original):

The frequency translator of Claim 21, said frequency translator circuitry further comprising a nonvolatile memory.

Claim 28 (original):

The frequency translator of Claim 27 wherein said nonvolatile memory contains control data to configure a prescaler within the phase-locked loop.

Claim 29 (original):

The frequency translator of Claim 21 wherein said frequency translator circuitry generates about a 622.08 MHZ output in response to about a 155.52 MHZ input.

Claim 30 (cancelled):

The frequency translator of Claim 21 wherein said conductive lead is a portion of printed wiring on the circuit board.

Claim 31 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device comprising at least one inductive segment of printed wiring.

Claim 32 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is coupled to another passive device.

Claim 33 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is coupled to at least four other passive devices.

Claim 34 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is serially coupled to another passive device.

Claim 35 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is a curvilinear portion of printed wiring on the circuit board.

Claim 36 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is an inductor.

Claim 37 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is a capacitor.

Claim 38 (cancelled):

The frequency translator of Claim 21 wherein said at least one passive device is a resistor.

Claim 39 (currently amended):

The frequency translator of Claim 21 wherein said resonator is a surface-acoustic wave device packaged in a carrier adapted to be attached to the printed circuit board over the compliant material.

Claim 40 (original):

The frequency translator of Claim 21 wherein said circuit board is contained within a carrier.

Claim 41 (cancelled):

The frequency translator of Claim 40 wherein said carrier having a through-hole about said electrically conductive lead.

Claim 42 (currently amended):

A method of fabricating a frequency translator circuit on a circuit board having a resonator device adapted for coupling to the circuit board and coupled to a separate impedance network including at least one a plurality of passive devices and an electrically conductive lead associated with each of said passive devices, shorting-circuiting at least a portion of said passive device, the method comprising the steps of:

~~attached~~ securing the resonator to ~~[[a]] the circuit board with~~ using a compliant material positioned between the resonator and the circuit board, the compliant material having a Young's Modulus which is less than the Young's Modulus of the material of the circuit board;

providing a reference frequency to the frequency translator circuit;

observing an output frequency generated by the frequency translator circuit;

short-circuiting at least a portion of one or more of the plurality of passive devices by severing the respective electrically conductive leads associated therewith; and,

observing the output frequency generated by the frequency translator circuit after the one or more of said conductive leads ~~has~~ have been severed.

Claim 43 (currently amended):

The method of Claim 42, said ~~compliant~~ compliant material comprising silicone.

Claim 44 (original):

The method of Claim 42, said compliant material comprising a metal or metal alloy filling.

Claim 45 (original):

The method of Claim 42, said compliant material comprising a silver-filled silicone.

Claim 46 (currently amended):

The method of Claim 42, said compliant material having a Young's Modulus of less than 1 ~~Gpa~~ GPa.

Claim 47 (currently amended):

The method of Claim 42, said ~~compliant~~ compliant material having a Young's Modulus of less than .5 GPa.

Claim 48 (new):

The method of claim 42, wherein each of the conductive leads is defined by a strip of wiring on the circuit board, the conductive leads being connected together to define a continuous strip of wiring on the circuit board with at least a portion thereof being in the shape of a loop, each of the passive devices being defined by a curved segment of wiring terminating into opposed terminal ends and having a conductive lead extending and connected therebetween.

Claim 49 (new):

The method of claim 48, wherein the passive devices extend around the loop defined by a portion of said conductive leads in a spaced-apart relationship.